

Claims

1. Method for detecting the attention level of a vehicle operator, wherein a steering performance of the vehicle operator is monitored, **characterized in** that a phase relationship between a change of a steering angle (β) of at least one steerable wheel (22) of the vehicle and a change of the steering wheel angle (α) is evaluated.
2. Method according to claim 1, **characterized in** that the phase relationship is evaluated during time intervals when steering motions of the vehicle are not caused by an intentional steering action of the vehicle operator.
3. Method according to one of the preceding claims, **characterized in** that the phase relationship is evaluated within a time interval (t_2 to t_3) where the change of the steering wheel angle (α) follows a change of the steering angle (β).
4. Method according to one of the preceding claims, **characterized in** that the length of the time interval (t_2 to t_3) is evaluated.
5. Method according to one of the preceding claims, **characterized in** that a slope of the steering angle (α) during the time interval (t_2 to t_3) is evaluated.
6. Method according to one of the preceding claims, **characterized in** that the slope of the steering angle (α) is compared to a slope of the steering angle

(β).

7. Method according to one of the preceding claims, **characterized in** that the length of the time interval (t_2 to t_3) and/or the slope is compared with at least one predefinable limit value.

8. Method according to one of the preceding claims, **characterized in** that a frequency with which the at least one limit value is exceeded during a predefinable time interval is monitored.

9. Method according to one of the preceding claims, **characterized in** that at least one action is initiated when the at least one limit value is reached within a predefinable deviation, when the at least one limit value is exceeded and/or when the at least one limit value is exceeded with a frequency greater than a predefined frequency.

10. Method according to claim 9, **characterized in** that an automatic steering intervention occurs.

11. Method according to claim 9, **characterized in** that at least one acoustic, optic and/or haptic message is generated.

12. Method according to one of the preceding claims, **characterized in** that stepped actions are initiated depending on a detected attention level.

13. Method according to one of the preceding claims, **characterized in** that for determining the steering angle (β) and the steering wheel angle (α), an angular position and/or a rotation speed of the rotor of a servo motor (24) of the electric steering assist (36) and an angular position of a steering column are evaluated.

14. Method according to one of the preceding claims, **characterized in** that a steering torque of an electric steering assist (36) is evaluated for determining the phase difference.

15. Device (30) for detecting the attention level of a vehicle operator, with at least one sensor device detecting the steering performance of the vehicle and with a signal measurement and evaluation unit (32) capable of generating a signal (48) corresponding to the attention level, said signal depending on a phase relationship between a steering angle (β) of at least one steerable wheel (22) of the vehicle and a steering wheel angle (α).